INDEX TO AUTHORS

A

Ackermann, W. W. α-Ketoglutaric acid oxidase; an assay procedure, 557

Allen, Frank Worthington. See *Bacher and Allen*, 511

Ashby, Winifred, and **Schuster, Ernest M.** Carbonic anhydrase in the brain of the new-born in relation to functional maturity, 109

Awad, William Ibrahim. See *Moubasher, Sina, Awad, and Othman*, 693

B

Bacher, James E., and **Allen, Frank Worthington.** Solubility and sedimentation studies on certain pentose nucleic acids, 511

Baker, C. F. See *Werthessen, Baker, and Field*, 145

Barker, H. A. See *Stadtman and Barker*, 769

Bennett, Frances A. See *Gibbs, Dumrose, Bennett, and Bubeck*, 545

Bessman, S. P. See *Schwerin, Bessman, and Waelsch*, 37

Betheil, Joseph J. See *Plaut, Betheil, and Lardy*, 795

Bloom, B., Chaikoff, I. L., Reinhardt, W. O., Entenman, C., and **Dauben, W. G.** The quantitative significance of the lymphatic pathway in transport of absorbed fatty acids, 1

Bloom, Walter Lyon. See *Pinchot and Bloom*, 9

Bogash, Richard. See *Tint and Bogash*, 501

Bollman, Jesse L. See *Flock and Bollman*, 523

Borenfreund, Ellen. See *Dische and Borenfreund*, 517

Boricious, Jean K. See *Herrmann, Nicholas, and Boricious*, 321

Borsook, Henry, Deasy, Clara L., Haagen-Smit, A. J., Keighley, Geoffrey, and **Lowy, Peter H.** The uptake *in vitro* of C^{14}-labeled glycine, L-leucine, and L-lysine by different components of guinea pig liver homogenate, 529

Bovarnick, Marianna R., and **Miller, Judith C.** Oxidation and transamination of glutamate by typhus rickettsiae, 661

Bubeck, Margaret R. See *Gibbs, Dumrose, Bennett, and Bubeck*, 545

Byers, Sanford O., Friedman, Meyer, and **Michaelis, Fred.** Observations concerning the production and excretion of cholesterol in mammals. I. Plasma cholesterol after bile duct ligation and free cholesterol injection, 71

C

Camien, Merrill N., and **Dunn, Max S.** Antagonisms in the utilization of D-amino acids by lactic acid bacteria. I. Influence of DL-ethionine on the utilization of D-methionine, 283

Caputto, R., Leloir, Luis F., Cardini, C. E., and **Paladini, A. C.** Isolation of the coenzyme of the galactose phosphate-glucose phosphate transformation, 333

Cardini, C. E. See *Caputto, Leloir, Cardini, and Paladini*, 333

Cartwright, George E., Gubler, Clark J., and **Wintrobe, Maxwell M.** The anemia of infection. XII. The effect of turpentine and colloidal thorium dioxide on the plasma iron and plasma copper of dogs, 579

—. See *Gubler, Cartwright, and Wintrobe*, 563, 575

Chaikoff, I. L. See *Bloom, Chaikoff, Reinhardt, Entenman, and Dauben*, 1

—. See *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben*, 719, 727

—. See *Taurog, Chaikoff, and Tong*, 99

Chaikoff, I. L. See *Taurog, Tong, and Chaikoff*, 83
—. See *Weinman, Chaikoff, Dauben, Gee, and Entenman*, 735
Clowdus, Bernard F. See *Crookshank and Clowdus*, 307
Cohen, Saul L. The conjugated steroids. I. A fractionation procedure for the rapid isolation of estriol monoglucuronide from human pregnancy urine, 417
Cohen, Stanley, and **Lewis, Howard B.** The nitrogenous metabolism of the earthworm (*Lumbricus terrestris*). II. Arginase and urea synthesis, 479
Connors, William M., Pihl, Alexander, Dounce, Alexander L., and **Stotz, Elmer.** Purification of liver esterase, 29
Consolazio, C. F. See *Hussey, Quick, Stefanini, Consolazio, and Sargent*, 105
Crookshank, H. R., and **Clowdus, Bernard F.** Ingestion of histidine and the glutamic acid blood level in rats, 307
Cunningham, Mary. See *Geyer and Cunningham*, 641
Curl, A. Laurence, and **Jansen, Eugene F.** Effect of high pressures on trypsin and chymotrypsin, 45

D

Dauben, W. G. See *Bloom, Chaikoff, Reinhardt, Entenman, and Dauben*, 1
—. See *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben*, 719, 727
—. See *Weinman, Chaikoff, Dauben, Gee, and Entenman*, 735
Deasy, Clara L. See *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy*, 529
Dietrich, L. S. See *Thompson, Dietrich, and Elvehjem*, 175
Dische, Zacharias, and **Borenfreund, Ellen.** A spectrophotometric method for the microdetermination of hexosamines, 517
Dounce, Alexander L. See *Connors, Pihl, Dounce, and Stotz*, 29
Dumrose, Rosemary. See *Gibbs, Dumrose, Bennett, and Bubeck*, 545
Dunn, Max S., and **McClure, Lawrence E.** The response of *Lactobacillus casei* to partial hydrolysates of protein, 223
—. See *Camien and Dunn*, 283

E

Eigen, Edward. See *Winsten and Eigen*, 155
Elvehjem, C. A. See *Thompson, Dietrich, and Elvehjem*, 175
Elwyn, David, and **Sprinson, David B.** The relation of folic acid to the metabolism of serine, 475
— and —. The rôle of serine and acetate in uric acid formation, 465
Engel, Frank L. See *Schwartz and Engel*, 197
Entenman, C. See *Bloom, Chaikoff, Reinhardt, Entenman, and Dauben*, 1
—. See *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben*, 719, 727
—. See *Weinman, Chaikoff, Dauben, Gee, and Entenman*, 735

F

Field, N. S. See *Werthessen, Baker, and Field*, 145
Flock, Eunice V., and **Bollman, Jesse L.** The influence of bile on the alkaline phosphatase activity of intestinal lymph, 523
Forsythe, Richard H., and **Foster, Joseph F.** Egg white proteins. I. Electrophoretic studies on whole white, 377
— and —. II. An ethanol fractionation scheme, 385
Foster, Joseph F. See *Forsythe and Foster*, 377, 385
Fredsted, I. See *Hoff-Jørgensen, Friedkin, and Kalckar*, 461
Freeman, Monroe E. See *Schack, Whitney, and Freeman*, 551
Friedkin, Morris. Desoxyribose-1-phosphate. II. The isolation of crystalline desoxyribose-1-phosphate, 449

Friedkin, Morris, and **Kalckar, Herman M.** Desoxyribose-1-phosphate. I. The phosphorolysis and resynthesis of purine desoxyribose nucleoside, 437
—. See *Hoff-Jørgensen, Friedkin, and Kalckar,* 461
Friedman, Leo, and **Kline, O. L.** The amino acid-sugar reaction, 599
Friedman, Meyer. See *Byers, Friedman, and Michaelis,* 71
Fu, Shou-Cheng J. See *Levintow, Fu, Price, and Greenstein,* 633

G

Gallagher, T. F. See *Koechlin, Kritchevsky, and Gallagher,* 393
Gee, Mildred. See *Weinman, Chaikoff, Dauben, Gee, and Entenman,* 735
Geyer, R. P., and **Cunningham, Mary.** Metabolism of fatty acids *in vitro,* studied with odd and even members of the $RC^{14}OOH$ series, 641
Gibbs, Martin, Dumrose, Rosemary, Bennett, Frances A., and **Bubeck, Margaret R.** On the mechanism of bacterial fermentation of glucose to lactic acid studied with C^{14}-glucose, 545
Goldman, D. S., Chaikoff, I. L., Reinhardt, W. O., Entenman, C., and **Dauben, W. G.** Site of formation of plasma phospholipides studied with C^{14}-labeled palmitic acid, 727
—, —, —, —, and —. The oxidation of palmitic acid-1-C^{14} by extrahepatic tissues of the dog, 719
Greenstein, Jesse P. See *Levintow, Fu, Price, and Greenstein,* 633
—. See *Levintow, Price, and Greenstein,* 55
Griffiths, Mervyn. The mechanism of the diabetogenic action of uric acid, 289
Grollman, Arthur. See *Stimmel, Grollman, and Huffman,* 677
Gross, J., and **Leblond, C. P.** Metabolism of the thyroid hormone in the rat as shown by physiological doses of labeled thyroxine, 489
Gubler, Clark J., Cartwright, George E., and **Wintrobe, Maxwell M.** The anemia of infection. X. The effect of infection on the absorption and storage of iron by the rat, 563
—, —, and —. XI. The effect of turpentine and cobalt on the absorption of iron by the rat, 575
—. See *Cartwright, Gubler, and Wintrobe,* 579

H

Haagen-Smit, A. J. See *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy,* 529
Hamilton, Paul B., and **Ortiz, Priscilla J.** Proline and hydroxyproline: purification, reaction with ninhydrin, and some properties of their *N*-nitroso derivatives, 607
Harkness, David M. See *Muntwyler, Seifter, and Harkness,* 181
Haugaard, Niels. See *Stadie, Haugaard, and Hills,* 617
Herrmann, Heinz, Nicholas, J. S., and **Boricious, Jean K.** Toluidine blue binding by developing muscle tissue: assay and data on the mechanism involved, 321
Hills, A. Gorman. See *Stadie, Haugaard, and Hills,* 617
Hirata, Y., and **Nakanishi, K.** Grifolin, an antibiotic from a Basidiomycete, 135
Hirschmann, Frieda B. See *Hirschmann and Hirschmann,* 259
Hirschmann, H., and **Hirschmann, Frieda B.** Steroid excretion in a case of adrenocortical carcinoma. IV. Δ^5-pregnenetriol-3β,16α,20α, 259
Hoff-Jørgensen, E., Friedkin, Morris, and **Kalckar, Herman M.** Desoxyribose-1-phosphate. III. Comparison of microbiological and spectrophotometric estimations of enzymatically produced purine desoxyribose nucleoside, 461
Holland, Bryant R. See *Meinke and Holland,* 251
Huff, Jesse W. See *Skeggs, Nepple, Valentik, Huff, and Wright,* 211

Huffman, Max N. See *Stimmel, Grollman, and Huffman*, 677

Hussey, C. V., Quick, Armand J., Stefanini, Mario, Consolazio, C. F., and **Sargent, Frederick, 2nd.** Effect of sodium citrate and heparin on removal of calcium from blood and serum by Amberlite, 105

J

Jansen, Eugene F. See *Curl and Jansen*, 45

Johnson, R. Bernal, and **Lardy, Henry A.** Orthophosphate uptake during the oxidation of fatty acids, 235

K

Kalckar, Herman M. See *Friedkin and Kalckar*, 437

—. See *Hoff-Jørgensen, Friedkin, and Kalckar*, 461

Keighley, Geoffrey. See *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy*, 529

King, Ruth M. The effectiveness of lactic acid as a hemolytic agent in the determination of blood oxygen, 485

Kline, O. L. See *Friedman and Kline*, 599

Koechlin, Bernard A., Kritchevsky, Theodore H., and **Gallagher, T. F.** Preparation of deuterium steroid hormones from bile acids and the formation of α,β-unsaturated ketones from 3-ketocholane derivatives, 393

Kritchevsky, Theodore H. See *Koechlin, Kritchevsky, and Gallagher*, 393

Kuby, Stephen A. See *Plaut, Kuby, and Lardy*, 243

L

Lampen, J. O. See *Wang, Sable, and Lampen*, 17

Langham, Wright H. See *Leifer, Langham, Nyc, and Mitchell*, 589

Lardy, Henry A. See *Johnson and Lardy*, 235

—. See *Plaut, Betheil, and Lardy*, 795

—. See *Plaut, Kuby, and Lardy*, 243

Leblond, C. P. See *Gross and Leblond*, 489

Leifer, Edgar, Langham, Wright H., Nyc, Joseph F., and **Mitchell, Herschel K.** The use of isotopic nitrogen in a study of the conversion of 3-hydroxyanthranilic acid to nicotinic acid in *Neurospora*, 589

Leloir, Luis F. See *Caputto, Leloir, Cardini, and Paladini*, 333

Levine, Melvin, and **Tarver, Harold.** On the synthesis and some applications of serine-β-C^{14}, 427

Levintow, Leon, Fu, Shou-Cheng J., Price, Vincent E., and **Greenstein, Jesse P.** Preparation and enzymatic hydrolysis of three new homologous dehydropeptides, 633

—, **Price, Vincent E.,** and **Greenstein, Jesse P.** A resolution of histidine, cystine, and alanine by asymmetric enzymatic hydrolysis of the racemic amides, 55

Lewis, Howard B. See *Cohen and Lewis*, 479

Logan, Milan A. See *Neuman and Logan*, 299

London, Irving M. The conversion of hematin to bile pigment, 373

— and **Rittenberg, D.** Deuterium studies in normal man. I. The rate of synthesis of serum cholesterol. II. Measurement of total body water and water absorption, 687

— and **West, Randolph.** The formation of bile pigment in pernicious anemia, 359

—, —, **Shemin, David,** and **Rittenberg, D.** On the origin of bile pigment in normal man, 351

—, —, —, and —. Porphyrin formation and hemoglobin metabolism in congenital porphyria, 365

Lowy, Peter H. See *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy*, 529

M

Mason, Harold L., and **Schneider, John J.** Isolation of Δ^{16}-androsten-3(α)-ol

from the urine of women with adrenal cortical tumors, 593

McClure, Lawrence E. See *Dunn and McClure*, 223

Meinke, W. W., and **Holland, Bryant R.** Evidence for a calcium requirement for *Lactobacillus delbrueckii* 9595, 251

Meister, Alton. Reduction of α,γ-diketo and α-keto acids catalyzed by muscle preparations and by crystalline lactic dehydrogenase, 117

Michaelis, Fred. See *Byers, Friedman, and Michaelis*, 71

Miller, Judith C. See *Bovarnick and Miller*, 661

Mitchell, Herschel K. See *Leifer, Langham, Nyc, and Mitchell*, 589

Møller-Jensen, Inger. See *Friedkin and Kalckar*, 437

Moubasher, Radwan, Sina, Aly, Awad, William Ibrahim, and **Othman, Abd-El Mogid.** Determination of ammonia evolved from α-amino acids by *peri*-naphthindan-2,3,4-trione hydrate and its *m*-nitro derivative, 693

Muntwyler, Edward, Seifter, Sam, and **Harkness, David M.** Some effects of restriction of dietary protein on the intracellular components of liver, 181

N

Nakanishi, K. See *Hirata and Nakanishi*, 135

Nepple, Helga M. See *Skeggs, Nepple, Valentik, Huff, and Wright*, 211

Neuman, Robert E., and **Logan, Milan A.** The determination of hydroxyproline, 299

Nicholas, J. S. See *Herrmann, Nicholas, and Boricious*, 321

Niss, H. F. See *Tove, Niss, and Wilson*, 77

Nyc, Joseph F. See *Leifer, Langham, Nyc, and Mitchell*, 589

O

Ortiz, Priscilla J. See *Hamilton and Ortiz*, 607

Othman, Abd-El Mogid. See *Moubasher, Sina, Awad, and Othman*, 693

P

Paladini, A. C. See *Caputto, Leloir, Cardini, and Paladini*, 333

Patton, Stuart. The formation of maltol in certain carbohydrate-glycine systems, 131

Pihl, Alexander. See *Connors, Pihl, Dounce, and Stotz*, 29

Pinchot, Gifford B., and **Bloom, Walter Lyon.** Alterations in the level of muscle phosphocreatine of guinea pigs produced by the injection of diphtheria toxin, 9

Plaut, G. W. E., Betheil, Joseph J., and **Lardy, Henry A.** The relationship of folic acid to formate metabolism in the rat, 795

—, **Kuby, Stephen A.,** and **Lardy, Henry A.** Systems for the separation of phosphoric esters by solvent distribution, 243

Price, Vincent E. See *Levintow, Fu, Price, and Greenstein*, 633

—. See *Levintow, Price, and Greenstein*, 55

Q

Quick, Armand J. See *Hussey, Quick, Stefanini, Consolazio, and Sargent*, 105

R

Racker, E. Crystalline alcohol dehydrogenase from bakers' yeast, 313

Radin, Norman S., Rittenberg, D., and **Shemin, David.** The rôle of acetic acid in the biosynthesis of heme, 755

—, —, and —. The rôle of glycine in the biosynthesis of heme, 745

Reinhardt, W. O. See *Bloom, Chaikoff, Reinhardt, Entenman, and Dauben*, 1

—. See *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben*, 719, 727

Richert, Dan A., and **Westerfeld, W. W.** Purine metabolism in rat liver homogenates, 203
—. See *Westerfeld and Richert,* 163
Rittenberg, D. See *London and Rittenberg,* 687
—. See *London, West, Shemin, and Rittenberg,* 351, 365
—. See *Radin, Rittenberg, and Shemin,* 745, 755
—. See *Sprinson and Rittenberg,* 405

S

Sable, H. Z. See *Wang, Sable, and Lampen,* 17
Sargent, Frederick, 2nd. See *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
Schack, J. A., Whitney, Richard W., and **Freeman, Monroe E.** Hyaluronidase inhibitor in blood serum of scorbutic guinea pigs, 551
Schneider, John J. See *Mason and Schneider,* 593
Schubert, Jack, and **White, Marcia R.** The effect of different dose levels of zirconium on the excretion and distribution of plutonium and yttrium, 191
Schuster, Ernest M. See *Ashby and Schuster,* 109
Schwartz, Theodore B., and **Engel, Frank L.** A photometric ninhydrin method for the measurement of proteolysis, 197
Schwerin, Paula, Bessman, S. P., and **Waelsch, Heinrich.** The uptake of glutamic acid and glutamine by brain and other tissues of the rat and mouse, 37
Seifter, Sam. See *Muntwyler, Seifter, and Harkness,* 181
Shacter, Bernard. Serum catecholase: properties of the enzyme and nature of an endogenous inhibitor, 697
Shemin, David. See *London, West, Shemin, and Rittenberg,* 351, 365
—. See *Radin, Rittenberg, and Shemin,* 745, 755
Sina, Aly. See *Moubasher, Sina, Awad, and Othman,* 693
Skeggs, Helen R., Nepple, Helga M., Valentik, Katherine A., Huff, Jesse W., and **Wright, Lemuel D.** Observations on the use of *Lactobacillus leichmannii* 4797 in the microbiological assay of vitamin B_{12}, 211
Sprinson, David B., and **Rittenberg, D.** The metabolic activity of the α-, β-, and γ-hydrogen atoms of L-leucine and the α-hydrogen of glycine, 405
—. See *Elwyn and Sprinson,* 465, 475
Stadie, William C., Haugaard, Niels, and **Hills, A. Gorman.** The effect of insulin and adrenal cortical extract on the hexokinase reaction in extracts of muscle from depancreatized cats, 617
Stadtman, E. R., and **Barker, H. A.** Fatty acid synthesis by enzyme preparations of *Clostridium kluyveri.* VI. Reactions of acyl phosphates, 769
Stefanini, Mario. See *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
Stimmel, Benjamin F., Grollman, Arthur, and **Huffman, Max N.** The metabolism of 16-ketoestrone and 16-keto-α-estradiol in man, 677
Stotz, Elmer. See *Connors, Pihl, Dounce, and Stotz,* 29
Swanson, Marjorie A. Phosphatases of liver. I. Glucose-6-phosphatase, 647

T

Tarver, Harold. See *Levine and Tarver,* 427
Taurog, Alvin, Chaikoff, I. L., and **Tong, W.** The nature of plasma iodine as revealed by filter paper partition chromatography, 99
—, **Tong, W.,** and **Chaikoff, I. L.** The monoiodotyrosine content of the thyroid gland, 83
Thompson, H. T., Dietrich, L. S., and **Elvehjem, C. A.** The use of *Lactobacillus leichmannii* in the estimation of vitamin B_{12} activity, 175
Tint, Howard, and **Bogash, Richard.** Purification of hyaluronidase, 501
Tong, W. See *Taurog, Chaikoff, and Tong,* 99

Tong, W. See *Taurog, Tong, and Chaikoff*, 83

Tove, Shirley R., Niss, H. F., and **Wilson, P. W.** Fixation of N_2^{15} by excised nodules of leguminous plants, 77

Tyler, David B. Some factors affecting the action of 2,4-dinitrophenol on the oxygen uptake of excised rat brain, 711

V

Valentik, Katherine A. See *Skeggs, Nepple, Valentik, Huff, and Wright*, 211

du Vigneaud, Vincent. See *Wilson and du Vigneaud*, 63

W

Waelsch, Heinrich. See *Schwerin, Bessman, and Waelsch*, 37

Wang, T. P., Sable, H. Z., and **Lampen, J. O.** Enzymatic deamination of cytosine nucleosides, 17

Weinman, E. O., Chaikoff, I. L., Dauben, W. G., Gee, Mildred, and **Entenman, C.** Relative rates of conversion of the various carbon atoms of palmitic acid to carbon dioxide by the intact rat, 735

Werthessen, N. T., Baker, C. F., and **Field, N. S.** Conversion of estrone on incubation in blood, 145

West, Randolph. See *London and West*, 359

—. See *London, West, Shemin, and Rittenberg*, 351, 365

Westerfeld, W. W., and **Richert, Dan A.** Dietary factors related to liver xanthine oxidase, 163

—. See *Richert and Westerfeld*, 203

White, Marcia R. See *Schubert and White*, 191

Whitney, Richard W. See *Schack, Whitney, and Freeman*, 551

Williams, J. N., Jr. A micromethod for the determination of xanthine and guanine in urine, 627

Wilson, John Eric, and **du Vigneaud, Vincent.** Inhibition of the growth of the rat by L-penicillamine and its prevention by aminoethanol and related compounds, 63

Wilson, P. W. See *Tove, Niss, and Wilson*, 77

Winsten, Walter A., and **Eigen, Edward.** Bioautographic studies with use of *Leuconostoc citrovorum* 8081, 155

Wintrobe, Maxwell M. See *Cartwright, Gubler, and Wintrobe*, 579

—. See *Gubler, Cartwright, and Wintrobe*, 563, 575

Wright, Lemuel D. See *Skeggs, Nepple, Valentik, Huff, and Wright*, 211

INDEX TO SUBJECTS

A

Acetate: Uric acid formation, rôle, *Elwyn and Sprinson*, 465

Acetic acid: Heme biosynthesis, rôle, *Radin, Rittenberg, and Shemin*, 755

Acyl phosphate(s): Reaction, *Clostridium kluyveri* enzyme preparations, *Stadtman and Barker*, 769

Adrenal(s): Cortex extract, muscle hexokinase reaction, pancreatectomy, effect, *Stadie, Haugaard, and Hills*, 617

— tumor, urine, Δ^{16}-androsten-3(α)-ol isolation, *Mason and Schneider*, 593

Adrenocortical carcinoma: Δ^5-Pregnenetriol-3β,16α,20α excretion, *Hirschmann and Hirschmann*, 259

Steroid excretion, *Hirschmann and Hirschmann*, 259

Alanine: Resolution, enzymatic, *Levintow, Price, and Greenstein*, 55

Amberlite: Blood and blood serum calcium removal, heparin and, effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent*, 105

— — — — calcium removal, sodium citrate and, effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent*, 105

Amino acid(s): α-, ammonia determination, *peri*-naphthindan-2,3,4-trione hydrate use, *Moubasher, Sina, Awad, and Othman*, 693

D-, lactic acid bacteria, utilization, *Camien and Dunn*, 283

-Sugar reaction, *Friedman and Kline*, 599

Aminoethanol: Growth, effect, *Wilson and du Vigneaud*, 63

Ammonia: α-Amino acids, determination, *peri*-naphthindan-2,3,4-trione hydrate use, *Moubasher, Sina, Awad, and Othman*, 693

Androsten-3(α)-ol: Δ^{16}-, urine, adrenal cortex tumor, isolation, *Mason and Schneider*, 593

Anemia: Infection, *Gubler, Cartwright, and Wintrobe*, 563, 575

Cartwright, Gubler, and Wintrobe, 579

Pernicious, bile pigment formation, *London and West*, 359

Anhydrase: Carbonic, brain, new-born, *Ashby and Schuster*, 109

Anthranilic acid: 3-Hydroxy-. *See* Hydroxyanthranilic acid

Antibiotic substance: Basidiomycete, *Hirata and Nakanishi*, 135

Arginase: Synthesis, earthworm, *Cohen and Lewis*, 479

B

Bacillus: *See also Lactobacillus*

Bacteria: Lactic acid, D-amino acid utilization, *Camien and Dunn*, 283

— —, D-methionine utilization, DL-ethionine effect, *Camien and Dunn*, 283

See also Clostridium, Leuconostoc

Basidiomycete: Antibiotic substance, *Hirata and Nakanishi*, 135

Grifolin, *Hirata and Nakanishi*, 135

Bile: Acids, deuterium steroid hormones, preparation from, *Koechlin, Kritchevsky, and Gallagher*, 393

Duct ligation, blood plasma cholesterol, effect, *Byers, Friedman, and Michaelis*, 71

Intestinal lymph phosphatase, alkaline, effect, *Flock and Bollman*, 523

Pigment, formation, anemia, pernicious, *London and West*, 359

—, hematin conversion to, *London*, 373

—, origin, *London, West, Shemin, and Rittenberg*, 351

Blood: Calcium, removal, heparin and Amberlite, effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
—, —, sodium citrate and Amberlite. effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
Estrone conversion, effect, *Werthessen, Baker, and Field,* 145
Glutamic acid, histidine ingestion, effect, *Crookshank and Clowdus,* 307
Oxygen, determination, lactic acid as hemolytic agent, *King,* 485
Blood plasma: Cholesterol, bile duct ligation and cholesterol injection, effect, *Byers, Friedman, and Michaelis,* 71
Copper, turpentine and thorium dioxide effect, *Cartwright, Gubler, and Wintrobe,* 579
Iodine, nature, *Taurog, Chaikoff, and Tong,* 99
Iron, turpentine and thorium dioxide effect, *Cartwright, Gubler, and Wintrobe,* 579
Phospholipides, formation site, labeled palmitic acid in study, *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben,* 727
Blood serum: Calcium, removal, heparin and Amberlite, effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
—, —, sodium citrate and Amberlite, effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
Catecholase, properties, *Shacter,* 697
Cholesterol synthesis, deuterium in study, *London and Rittenberg,* 687
Hyaluronidase inhibitor, scurvy, *Schack, Whitney, and Freeman,* 551
Brain: Carbonic anhydrase, new-born, *Ashby and Schuster,* 109
Glutamic acid and glutamine uptake, *Schwerin, Bessman, and Waelsch,* 37
Oxygen uptake, 2,4-dinitrophenol effect, *Tyler,* 711

C

Calcium: Blood, removal, sodium citrate and Amberlite effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
— serum, removal sodium, citrate and Amberlite effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
Lactobacillus delbrueckii requirement, *Meinke and Holland,* 251
Carbohydrate(s): -Glycine systems, maltol formation, *Patton,* 131
Carbon: β-, mass 14-labeled, serine synthesis, *Levine and Tarver,* 427
Mass 14-labeled glucose, glucose fermentation to lactic acid, mechanism, use in study, *Gibbs, Dumrose, Bennett, and Bubeck,* 545
— — glycine, liver uptake, *in vitro, Borsook, Deasy, Haagen-Smit, Keighley, and Lowy,* 529
— — L-leucine, liver uptake, *in vitro, Borsook, Deasy, Haagen-Smit, Keighley, and Lowy,* 529
— — L-lysine, liver uptake, *in vitro, Borsook, Deasy, Haagen-Smit, Keighley, and Lowy,* 529
— — palmitic acid, blood plasma phospholipides, formation site, use in study, *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben,* 727
— — — —, oxidation, *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben,* 719
Carbon dioxide: Palmitic acid conversion to, *Weinman, Chaikoff, Dauben, Gee, and Entenman,* 735
Carbonic anhydrase: Brain, new-born, *Ashby and Schuster,* 109
Carcinoma: Adrenocortical, Δ^5-pregnenetriol-3β,16α,20α excretion, *Hirschmann and Hirschmann,* 259
—, steroid excretion, *Hirschmann and Hirschmann,* 259
Catecholase: Blood serum, properties, *Shacter,* 697
Cholane: 3-Keto-. *See* Ketocholane
Cholesterol: Blood plasma, bile duct ligation and cholesterol injection,

Cholesterol—*continued:*
effect, *Byers, Friedman, and Michaelis,* 71
— serum, synthesis, deuterium in study, *London and Rittenberg,* 687
Excretion, *Byers, Friedman, and Michaelis,* 71
Production, *Byers, Friedman, and Michaelis,* 71
Chymotrypsin: Pressure effect, *Curl and Jansen,* 45
Clostridium kluyveri: Enzyme preparations, acyl phosphate reactions, *Stadtman and Barker,* 769
— —, fatty acid synthesis, *Stadtman and Barker,* 769
Cobalt: Iron absorption, effect, *Gubler, Cartwright, and Wintrobe,* 575
Coenzyme: Galactose phosphate-glucose phosphate transformation, isolation, *Caputto, Leloir, Cardini, and Paladini,* 333
Copper: Blood plasma, turpentine and thorium dioxide effect, *Cartwright, Gubler, and Wintrobe,* 579
Creatine: Phospho-. *See* Phosphocreatine
Cystine: Resolution, enzymatic, *Levintow, Price, and Greenstein,* 55
Cytosine: Nucleosides, deamination, enzymatic, *Wang, Sable, and Lampen,* 17

D

Dehydrogenase: Alcohol, crystalline, yeast, *Racker,* 313
Lactic, α,γ-diketo and α-keto acid reduction, effect, *Meister,* 117
Dehydropeptide(s): Enzyme hydrolysis and preparation, *Levintow, Fu, Price, and Greenstein,* 633
Desoxyribose: Nucleoside, purine, enzymatic, determination, microbiological and spectrophotometric, *Hoff-Jørgensen, Friedkin, and Kalckar,* 461
—, —, phosphorolysis and resynthesis, *Friedkin and Kalckar,* 437
Desoxyribose-1-phosphate: *Friedkin and Kalckar,* 437
Friedkin, 449
Desoxyribose-1-phosphate—*continued:*
Hoff-Jørgensen, Friedkin, and Kalckar, 461
Crystalline, isolation, *Friedkin,* 449
Deuterium: *London and Rittenberg,* 687
Blood serum cholesterol synthesis, use in study, *London and Rittenberg,* 687
Body water measurement and absorption, use in study, *London and Rittenberg,* 687
Steroid hormones, preparation from bile acids, *Koechlin, Kritchevsky, and Gallagher,* 393
Diabetes: Uric acid action, mechanism, *Griffiths,* 289
Diet: Liver xanthine oxidase, relation, *Westerfeld and Richert,* 163
Diketo acid(s): α,γ-, reduction, muscle preparations and lactic dehydrogenase, effect, *Meister,* 117
Dinitrophenol: 2,4-, brain oxygen uptake, effect, *Tyler,* 711
Diphtheria: Toxin, muscle phosphocreatine, effect, *Pinchot and Bloom,* 9

E

Earthworm: Arginase synthesis, *Cohen and Lewis,* 479
Nitrogen metabolism, *Cohen and Lewis,* 479
Urea synthesis, *Cohen and Lewis,* 479
Egg: White, electrophoresis, *Forsythe and Foster,* 377
—, proteins, *Forsythe and Foster,* 377, 385
—, —, ethanol fractionation, *Forsythe and Foster,* 385
Enzyme(s): Alanine, resolution, *Levintow, Price, and Greenstein,* 55
Clostridium kluyveri, acyl phosphate reactions, *Stadtman and Barker,* 769
— —, fatty acid synthesis, *Stadtman and Barker,* 769
Co-. *See* Coenzyme
Cystine, resolution, *Levintow, Price, and Greenstein,* 55

Enzyme(s)—*continued:*
Cytosine nucleosides, deamination, *Wang, Sable, and Lampen,* 17
Dehydropeptides, hydrolysis, *Levintow, Fu, Price, and Greenstein,* 633
Histidine, resolution, *Levintow, Price, and Greenstein,* 55
-Produced purine, desoxyribose nucleoside determination, microbiological and spectrophotometric, *Hoff-Jørgensen, Friedkin, and Kalckar,* 461
See also Anhydrase, Arginase, *etc.*
Esterase: Liver, purification, *Connors, Pihl, Dounce, and Stotz,* 29
Estradiol: 16-Keto-α-. *See* Keto-α-estradiol
Estriol: Monoglucuronide, urine, pregnancy, isolation, *Cohen,* 417
Estrone: Blood effect, *Werthessen, Baker, and Field,* 145
16-Keto-. *See* Ketoestrone
Ethanol: Amino-. *See* Aminoethanol
Ethionine: DL-, D-methionine utilization by lactic acid bacteria, effect, *Camien and Dunn,* 283

F

Fatty acid(s): Metabolism *in vitro, Geyer and Cunningham,* 641
Oxidation, orthophosphate uptake, *Johnson and Lardy,* 235
Synthesis, *Clostridium kluyveri* enzyme preparations, *Stadtman and Barker,* 769
Transport, lymphatic pathway relation, *Bloom, Chaikoff, Reinhardt, Entenman, and Dauben,* 1
Folic acid: Formate metabolism, relation, *Plaut, Betheil, and Lardy,* 795
Serine metabolism, relation, *Elwyn and Sprinson,* 475
Formate: Metabolism, folic acid relation, *Plaut, Betheil, and Lardy,* 795
Fungus: *See also* Basidiomycete

G

Galactose: Phosphate-glucose phosphate transformation, coenzyme isolation, *Caputto, Leloir, Cardini, and Paladini,* 333
Glucose: Fermentation to lactic acid, mechanism, carbon 14-glucose in study, *Gibbs, Dumrose, Bennett, and Bubeck,* 545
Phosphate-galactose phosphate transformation, coenzyme isolation, *Caputto, Leloir, Cardini, and Paladini,* 333
Glucose-6-phosphate: Liver, *Swanson,* 647
Glutamate: Oxidation and transamination, typhus rickettsiae, *Bovarnick and Miller,* 661
Glutamic acid: Blood, histidine ingestion, effect, *Crookshank and Clowdus,* 307
Uptake, brain, *Schwerin, Bessman, and Waelsch,* 37
Glutamine: Uptake, brain, *Schwerin, Bessman, and Waelsch,* 37
Glutaric acid: α-Keto-. *See* Ketoglutaric acid
Glycine: Carbohydrate-, systems, maltol formation, *Patton,* 131
Heme biosynthesis, rôle, *Radin, Rittenberg, and Shemin,* 745
α-Hydrogen, metabolic activity, *Sprinson and Rittenberg,* 405
Liver uptake *in vitro*, carbon 14-labeled, *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy,* 529
Grifolin: Basidiomycete, *Hirata and Nakanishi,* 135
Growth: Aminoethanol effect, *Wilson and du Vigneaud,* 63
L-Penicillamine effect, *Wilson and du Vigneaud,* 63
Guanine: Urine, determination, micro-, *Williams,* 627

H

Hematin: Bile pigment conversion from, *London,* 373
Heme: Biosynthesis, acetic acid rôle, *Radin, Rittenberg, and Shemin,* 755
—, glycine rôle, *Radin, Rittenberg, and Shemin,* 745

Hemoglobin: Metabolism, porphyria, *London, West, Shemin, and Rittenberg,* 365
Heparin: Blood calcium removal, Amberlite and, effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
— serum calcium removal, Amberlite and, effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent,* 105
Hexokinase: Muscle, reaction, insulin and adrenal cortex extract, pancreatectomy, effect, *Stadie, Haugaard, and Hills,* 617
Hexosamine(s): Determination, micro-, spectrophotometric, *Dische and Borenfreund,* 517
Histidine: Blood glutamic acid, ingestion effect, *Crookshank and Clowdus,* 307
Resolution, enzymatic, *Levintow, Price, and Greenstein,* 55
Hyaluronidase: Inhibitor, blood serum, scurvy, *Schack, Whitney, and Freeman,* 551
Purification, *Tint and Bogash,* 501
Hydroxyanthranilic acid: 3-, nicotinic acid conversion from, *Neurospora,* isotopic nitrogen in study, *Leifer, Langham, Nyc, and Mitchell,* 589
Hydroxyproline: Determination, *Neuman and Logan,* 299
Ninhydrin reaction with, *Hamilton and Ortiz,* 607
N-Nitroso derivatives, *Hamilton and Ortiz,* 607
Purification, *Hamilton and Ortiz,* 607

I

Infection: Anemia, *Gubler, Cartwright, and Wintrobe,* 563, 575
Cartwright, Gubler, and Wintrobe, 579
Iron absorption and storage, *Gubler Cartwright, and Wintrobe,* 563
Insulin: Muscle hexokinase reaction, pancreatectomy, effect, *Stadie, Haugaard, and Hills,* 617
Intestine: Lymph phosphatase, alkaline, bile effect, *Flock and Bollman,* 523
Iodine: Blood plasma, nature, *Taurog, Chaikoff, and Tong,* 99
Iron: Absorption and storage, infection effect, *Gubler, Cartwright, and Wintrobe,* 563
—, cobalt effect, *Gubler, Cartwright, and Wintrobe,* 575
—, turpentine effect, *Gubler, Cartwright, and Wintrobe,* 575
Blood plasma, turpentine and thorium dioxide effect, *Cartwright, Gubler, and Wintrobe,* 579

K

Keto acid(s): α-, reduction, muscle preparations and lactic dehydrogenase, effect, *Meister,* 117
Di-. *See* Diketo acid
Ketocholane: 3-, derivatives, α,β-unsaturated ketones, formation from, *Koechlin, Kritchevsky, and Gallagher,* 393
Keto-α-estradiol: 16-, metabolism, *Stimmel, Grollman, and Huffman,* 677
Ketoestrone: 16-, metabolism, *Stimmel, Grollman, and Huffman,* 677
Ketoglutaric acid: α-, oxidase, determination, *Ackermann,* 557
Ketone(s): α,β-Unsaturated, formation from 3-ketocholane, *Koechlin, Kritchevsky, and Gallagher,* 393

L

Lactic acid: Bacteria, D-amino acid utilization, *Camien and Dunn,* 283
—, D-methionine utilization, DL-ethionine effect, *Camien and Dunn,* 283
Blood oxygen determination, hemolytic agent, *King,* 485
Glucose fermentation to, mechanism, carbon 14-glucose in study, *Gibbs, Dumrose, Bennett, and Bubeck,* 545
Lactic dehydrogenase: α,γ-Diketo and α-keto acid reduction, effect, *Meister,* 117

Lactobacillus casei: Protein hydrolysates, effect, *Dunn and McClure*, 223
Lactobacillus delbrueckii: Calcium requirement, *Meinke and Holland*, 251
Lactobacillus leichmannii: Vitamin B_{12} determination, use, *Thompson, Dietrich, and Elvehjem*, 175
Skeggs, Nepple, Valentik, Huff, and Wright, 211
Legume(s): Nodules, nitrogen 15, fixation, *Tove, Niss, and Wilson*, 77
Leucine: L-, hydrogen atoms, metabolic activity, *Sprinson and Rittenberg*, 405
—, liver uptake *in vitro*, carbon 14-labeled, *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy*, 529
Leuconostoc citrovorum: Bioautographic studies, *Winsten and Eigen*, 155
Lipide(s): Phospho-. *See* Phospholipide
Liver: Carbon 14-labeled glycine, uptake *in vitro*, *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy*, 529
— — L-leucine, uptake *in vitro*, *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy*, 529
— — L-lysine, uptake *in vitro*, *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy*, 529
Esterase, purification, *Connors, Pihl, Dounce, and Stotz*, 29
Glucose-6-phosphate, *Swanson*, 647
Phosphatases, *Swanson*, 647
Protein effect, *Muntwyler, Seifter, and Harkness*, 181
Purine metabolism, *Richert and Westerfeld*, 203
Xanthine oxidase, dietary factors related to, *Westerfeld and Richert*, 163
Lumbricus terrestris: *See* Earthworm
Lymph: Intestine, phosphatase, alkaline, bile effect, *Flock and Bollman*, 523
Lymphatic(s): Fatty acid transport, relation, *Bloom, Chaikoff, Reinhardt, Entenman, and Dauben*, 1
Lysine: L-, liver uptake *in vitro*, carbon 14-labeled, *Borsook, Deasy, Haagen-Smit, Keighley, and Lowy*, 529

M

Maltol: Formation, carbohydrate-glycine systems, *Patton*, 131
Methionine: D-, lactic acid bacteria, utilization, DL-ethionine effect, *Camien and Dunn*, 283
Mold: *See also Neurospora*
Monoiodotyrosine: Thyroid, *Taurog, Tong, and Chaikoff*, 83
Muscle: α,γ-Diketo and α-keto acid reduction, effect, *Meister*, 117
Hexokinase, reaction, insulin and adrenal cortex extract, pancreatectomy, effect, *Stadie, Haugaard, and Hills*, 617
Phosphocreatine, diphtheria toxin, effect, *Pinchot and Bloom*, 9
Toluidine blue binding, determination and mechanism, *Herrmann, Nicholas, and Boricious*, 321

N

Neurospora: 3-Hydroxyanthranilic acid conversion to nicotinic acid in, isotopic nitrogen in study, *Leifer, Langham, Nyc, and Mitchell*, 589
New-born: Brain carbonic anhydrase, *Ashby and Schuster*, 109
Nicotinic acid: 3-Hydroxyanthranilic acid conversion to, *Neurospora*, isotopic nitrogen in study, *Leifer, Langham, Nyc, and Mitchell*, 589
Nitrogen: Isotopic, 3-hydroxyanthranilic acid conversion to nicotinic acid in *Neurospora*, use in study, *Leifer, Langham, Nyc, and Mitchell*, 589
Mass 15, fixation, legume nodules, *Tove, Niss, and Wilson*, 77
Metabolism, earthworm, *Cohen and Lewis*, 479
Nucleic acid: Pentose, solubility and sedimentation studies, *Bacher and Allen*, 511

Nucleoside(s): Cytosine, deamination, enzymatic, *Wang, Sable, and Lampen,* 17
Desoxyribose, purine, enzymatic, determination, microbiological and spectrophotometric, *Hoff-Jørgensen, Friedkin, and Kalckar,* 461
—, —, phosphorolysis and resynthesis, *Friedkin and Kalckar,* 437

O

Orthophosphate: Uptake, fatty acid oxidation, *Johnson and Lardy,* 235
Oxidase: α-Ketoglutaric acid, determination, *Ackermann,* 557
Xanthine, liver, dietary factors related to, *Westerfeld and Richert,* 163
Oxygen: Blood, determination, lactic acid as hemolytic agent, *King,* 485
Brain, uptake, 2,4-dinitrophenol effect, *Tyler,* 711

P

Palmitic acid: Carbon dioxide from, *Weinman, Chaikoff, Dauben, Gee, and Entenman,* 735
— 14-labeled, blood plasma phospholipides, formation site, use in study, *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben,* 727
-1-Carbon 14-labeled, oxidation, *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben,* 719
Pancreatectomy: Muscle hexokinase reaction, insulin and adrenal cortex extract, effect, *Stadie, Haugaard, and Hills,* 617
Penicillamine: L-, growth, effect, *Wilson and du Vigneaud,* 63
Pentose: Nucleic acid, solubility and sedimentation studies, *Bacher and Allen,* 511
Peptide(s): Dehydro-. *See* Dehydropeptide
Phenol: 2,4-Dinitro-. *See* Dinitrophenol
Phosphatase: Alkaline, intestinal lymph, bile effect, *Flock and Bollman,* 523
Liver, *Swanson,* 647
Phosphocreatine: Muscle, diphtheria toxin, effect, *Pinchot and Bloom,* 9
Phospholipide(s): Blood plasma, formation site, labeled palmitic acid in study, *Goldman, Chaikoff, Reinhardt, Entenman, and Dauben,* 727
Phosphoric ester(s): Separation, solvent distribution, *Plaut, Kuby, and Lardy,* 243
Pigment: Bile, formation, anemia, pernicious, *London and West,* 359
—, hematin conversion to, *London,* 373
—, origin, *London, West, Shemin, and Rittenberg,* 351
Plutonium: Excretion and distribution, zirconium effect, *Schubert and White,* 191
Porphyria: Hemoglobin metabolism, *London, West, Shemin, and Rittenberg,* 365
Prophyrin formation, *London, West, Shemin, and Rittenberg,* 365
Porphyrin: Formation, porphyria, *London, West, Shemin, and Rittenberg,* 365
Pregnancy: Urine, estriol monoglucuronide isolation, *Cohen,* 417
Pregnenetriol-3β, 16α, 20α: Δ^5-, excretion, adrenocortical carcinoma, *Hirschmann and Hirschmann,* 259
Proline: Hydroxy-. *See* Hydroxyproline
Ninhydrin reaction with, *Hamilton and Ortiz,* 607
N-Nitroso derivatives, *Hamilton and Ortiz,* 607
Purification, *Hamilton and Ortiz,* 607
Protein(s): Egg white, *Forsythe and Foster,* 377, 385
— —, electrophoresis, *Forsythe and Foster,* 377
— —, ethanol fractionation, *Forsythe and Foster,* 385
Hydrolysates, *Lactobacillus casei,* effect, *Dunn and McClure,* 223
Liver composition, effect, *Muntwyler, Seifter, and Harkness,* 181

Proteolysis: Determination, photometric ninhydrin method, *Schwartz and Engel*, 197
Purine: Desoxyribose nucleoside, enzymatic, determination, microbiological and spectrophotometric, *Hoff-Jørgensen, Friedkin, and Kalckar*, 461
— —, phosphorolysis and resynthesis, *Friedkin and Kalckar*, 437
Metabolism, liver, *Richert and Westerfeld*, 203

R

Ribose: Desoxy-. *See* Desoxyribose
Rickettsiae: Typhus, glutamate oxidation and transamination, *Bovarnick and Miller*, 661

S

Scurvy: Blood serum hyaluronidase inhibitor, *Schack, Whitney, and Freeman*, 551
Serine: β-Carbon 14-labeled, synthesis, *Levine and Tarver*, 427
Metabolism, folic acid relation, *Elwyn and Sprinson*, 475
Uric acid formation, rôle, *Elwyn and Sprinson*, 465
Sodium citrate: Blood serum calcium removal, Amberlite and, effect, *Hussey, Quick, Stefanini, Consolazio, and Sargent*, 105
Steroid(s): Conjugated, *Cohen*, 417
Excretion, adrenocortical carcinoma, *Hirschmann and Hirschmann*, 259
Hormone, deuterium, preparation from bile acids, *Koechlin, Kritchevsky, and Gallagher*, 393
Sugar(s): Amino acid-, reaction, *Friedman and Kline*, 599

T

Thorium dioxide: Colloidal, blood plasma iron and copper, effect, *Cartwright, Gubler, and Wintrobe*, 579
Thyroid: Hormone, metabolism, labeled thyroxine in study, *Gross and Leblond*, 489
Thyroid—*continued:*
Monoiodotyrosine, *Taurog, Tong, and Chaikoff*, 83
Thyroxine: Labeled, thyroid hormone metabolism, use in study, *Gross and Leblond*, 489
Toluidine blue: Binding, muscle, determination and mechanism, *Herrman, Nicholas, and Boricious*, 321
Toxin: Diphtheria, muscle phosphocreatine, effect, *Pinchot and Bloom*, 9
Trypsin: Chymo-. *See* Chymotrypsin
Pressure effect, *Curl and Jansen*, 45
Tumor: Adrenal cortex, urine Δ^{16}-androsten-3(α)-ol isolation, *Mason and Schneider*, 593
Turpentine: Blood plasma iron and copper, effect, *Cartwright, Gubler, and Wintrobe*, 579
Iron absorption, effect, *Gubler, Cartwright, and Wintrobe*, 575
Typhus: Rickettsiae, glutamate oxidation and transamination, *Bovarnick and Miller*, 661
Tyrosine: Moniodo-. *See* Monoiodotyrosine

U

Urea: Synthesis, earthworm, *Cohen and Lewis*, 479
Uric acid: Diabetogenic action, mechanism, *Griffiths*, 289
Formation, serine and acetate rôle, *Elwyn and Sprinson*, 465
Urine: Δ^{16}-Androsten-3(α)-ol isolation, adrenal cortex tumor, *Mason and Schneider*, 593
Guanine determination, micro-, *Williams*, 627
Pregnancy, estriol monoglucuronide isolation, *Cohen*, 417
Xanthine determination, micro-, *Williams*, 627

V

Vitamin(s): B_{12} determination, *Lactobacillus leichmannii* use, *Thompson Dietrich, and Elvehjem*, 175
Skeggs, Nepple, Valentik, Huff, and Wright, 211

W

Water: Body, measurement and absorption, deuterium in study, *London and Rittenberg,* 687

X

Xanthine: Oxidase, liver, dietary factors related to, *Westerfeld and Richert,* 163
Urine, determination, micro-, *Williams,* 627

Y

Yeast: Alcohol dehydrogenase, crystalline, *Racker,* 313
Yttrium: Excretion and distribution, zirconium effect, *Schubert and White,* 191

Z

Zirconium: Plutonium and yttrium excretion and distribution, effect, *Schubert and White,* 191